

WHAT IS CLAIMED IS:

1. A framing system for a composite concrete floor, the framing system comprising horizontally extending primary framing members supporting secondary framing members across the primary framing members, said primary and secondary framing members being made of a metallic structural material, each of said secondary framing members having two opposite ends provided with a shear shoe, said shear shoe being fixed to said primary framing members by means of a structural joint sufficient to provide a shear connection between said concrete floor and said primary framing members.

2. A framing system as defined in claim 1, wherein said shear shoes of each secondary framing member comprise an iron angle having:

- one horizontally extending face fixed by means of said structural joint to a horizontal face of a respective one of said primary framing members, and
- one vertically extending face fixed to said secondary framing members.

3. A framing system as defined in claim 2, wherein said structural joint is selected from the group consisting of a weld joint and a bolt joint.

4. A framing system as defined in claim 3, wherein said structural joint is a weld joint.

5. A framing system as defined in claim 1, wherein said secondary framing members have continuous shear connection to the concrete floor.

6. A framing system as defined in claim 5, wherein said secondary framing members have a top chord embedded in the concrete floor, thereby providing said shear connection to the concrete floor.

7. A framing system as defined in claim 1, wherein said primary framing member is a truss.

8. A framing system as defined in claim 1, wherein said primary framing member is a steel beam.

5 9. A framing system as defined in claim 8, wherein said secondary framing members are open-web steel joint.

10. A framing system as defined in claim 1, wherein said metallic structural material is steel.

10 11. A method of erecting a framing system for a composite concrete floor comprising the steps of:

- providing primary and secondary framing members made of a metallic structural material, each of said secondary framing members having two opposite ends provided with a shoe;

- placing said primary framing members in parallel relation;
- 15 - placing said secondary framing members transversally between said primary framing members with said shoes bearing on the primary framing members; and

- fixing said shoes to said primary framing members with a structural joint sufficient to provide a shear connection for said primary framing
- 20 members.

12. A method as defined in claim 11, wherein said step of fixing consists of welding said shoes to the primary framing members.

13. A method as defined in claim 11, wherein said secondary framing members have a continuous shear connector.

25 14. A method as claimed in claim 13, wherein said shear connector is a continuous top chord adapted to be embedded in said concrete floor.